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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,165	07/17/2000	Jae Beom Choi	8733.039.20	8415

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EXAMINER

CURTIS, CRAIG

ART UNIT PAPER NUMBER

2872

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

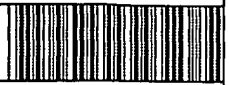
Office Action Summary

Application No.
09/618,165

Applicant(s)
CHOI et al.

Examiner
Craig Curtis

Art Unit
2872



The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 24, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15, 17-23, and 27-37 is/are pending in the application.
- 4a) Of the above, claim(s) 27-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15, and 17-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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DETAILED ACTION

Disposition of the Instant Application

This Office action is responsive to Applicants' Amendment B filed on 24 July 2002, which has been made of record in the file as paper no. 10. Independent claim 11 alone has been amended.

The examiner hereby acknowledges having erroneously applied the Tanaka (5,934,780) patent as a 35 U.S.C. § 102(b) reference in the previous Office action. As a result, the present Office action, in which Tanaka is applied as a 35 U.S.C. § 103(a) reference, has been accorded non-final status. Any inconvenience experienced by Applicants as a result of this error on the part of the examiner is sincerely regretted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 7-15, and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (5,934,780).

Tanaka discloses (see Fig. 1) the invention as claimed--a polarizer, comprising:

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a substrate part comprising a plurality of substrates stacked on top of one another (see Fig. 1, elements 8a; also see col. 4, lns. 28-31); and

wherein said substrate part has a rectangular structure (see Fig. 1);

wherein said substrate has a triangular structure (design choice in absence of criticality);

wherein said substrate part has a parallelogram structure (when viewed from above, as in Fig.

1);

wherein said substrate part comprises a plurality of substrates stacked on top of one another (see Fig. 1);

wherein the polarizer includes an optically absorptive material (all matter exhibits finite, that is, non-zero, optical absorption);

wherein each of said plurality of substrate parts is placed at a non-zero angle relative to a normal line of the surface of the polarizer holder (see Fig. 1);

wherein each of said plurality of substrate parts is placed at the Brewster's angle relative to a normal line of the surface of the polarizer holder (see col. 8, lns. 56-67);

a light source for generating light (Fig. 1, 1);

means for directing light onto said substrate part (see Fig. 1);

wherein said means for directing collimates said light (see Fig. 1, 7);

wherein said means for directing said light collimates said light and said substrate part partially polarizes said collimated light (inherent at or near Brewster's angle)--EXCEPT FOR wherein said substrate part(s) includes one or more quartz substrates.

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However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the invention of Tanaka such that said substrate part(s) be made of quartz and include one or more quartz substrates, such teaching being notoriously old and well-known in the art of polarizing UV light, for at least the purpose of minimizing the degree to which UV light propagating through said polarizer would be absorbed relative to the comparatively high absorption of UV light that would obtain when glass-based (i.e., non-quartz) polarizer substrates were used, since, as a substrate material, quartz is markedly more transparent to UV light than is conventional glass.

2. Claim 11 has been amended, in pertinent part, to include the following limitation: a polarizer holder supporting the quartz substrate part. It is noted with regard to this newly added limitation that although Tanaka does not provide an explicit teaching of a polarizer holder supporting said quartz substrate part, this reference certainly provides an inherent teaching of same; indeed, to contend otherwise would be equivalent to asserting that said quartz substrate part of Tanaka is self-supporting.

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Response to Arguments

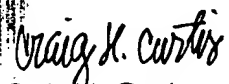
Applicants' arguments filed 24 July 2002 have been fully considered but have not been found persuasive.

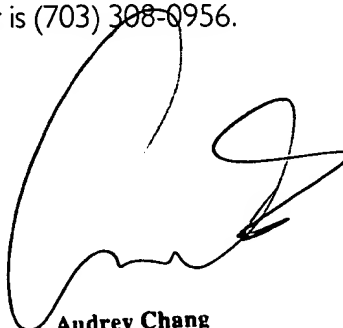
Applicants present two distinct arguments: that Tanaka neither teaches nor suggests (1) "a polarizer holder supporting the quartz substrate part" or (2) "a plurality of quartz substrate parts, each quartz part including one or more quartz substrates." Each of these arguments have been addressed in the body of the rejection of the claims as set forth hereinbefore.

CONTACT INFORMATION

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Curtis, whose telephone number is (703) 305-0776. The facsimile phone number for Art Unit 2872 is (703) 308-7721.

Any inquiry of a general nature regarding the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0956.


Craig H. Curtis
Group Art Unit 2872
18 October 2002


Audrey Chang
Primary Examiner
Technology Center 2800